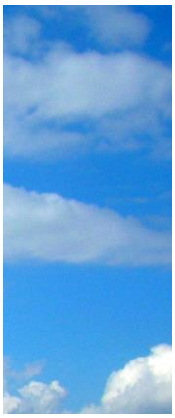
ICCAT Fish Aggregating Devices (FADs) Working Group Report




Objectives

- Information on FAD related to provisions in the relevant ICCAT conservation and management measures
- Assessment of the use of FADs in tropical tuna fisheries in ICCAT and of the relative contribution of FADs to overall fishing mortality in ICCAT tropical tuna fisheries
- Assessment of developments in FAD-related technology
- Consideration of recommendations to the Commission for possible additional actions relating to FAD management and recovery

Participation 2nd meeting 2016

- European Union
- Cote d'Ivoire
- Gabon
- Japan
- Senegal
- United States

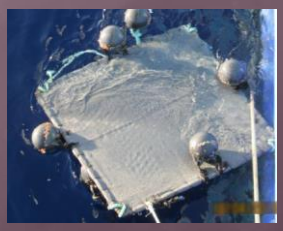
- ISSF
- Pew

Scientists
Commissioner (1)
Managers
Industry
NGOs

7 SCRS Docs and 4 presentations

Outputs

- **Synthesis of Findings Reached by the Ad-Hoc Working Group on FADs**



- **Final Recommendations**

Synthesis of Findings

- FADs seeded and active FADs have continued to increase in numbers. At least 17,000 FADs have been released each year in the ICCAT Convention area since 2010.
- FADs can remain active six months to a year; FADs are often exchanged between vessels, so a single vessel uses a FAD a much shorter time.
- The WG has provided the SCRS guidance for analysis of FAD moratoria

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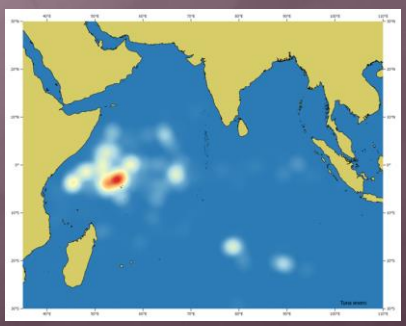
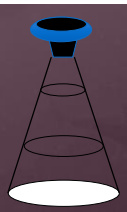
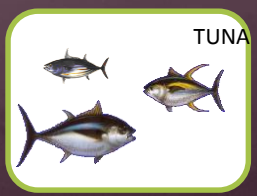
Synthesis of Findings Reached by the Ad-Hoc Working Group on FADs

- Buoys equipped with echo-sounders provide relative estimates of aggregate biomass (all species combined) under the FAD. It may be possible to differentiate between SKJ and the other two tropical tunas (BET and YFT):
  - Improve estimates of relative abundance obtained from purse seine CPUE.
  - Provide new estimates of relative abundance by using biomass estimated by the buoy prior to the FAD been fished (~ Fishery independent).







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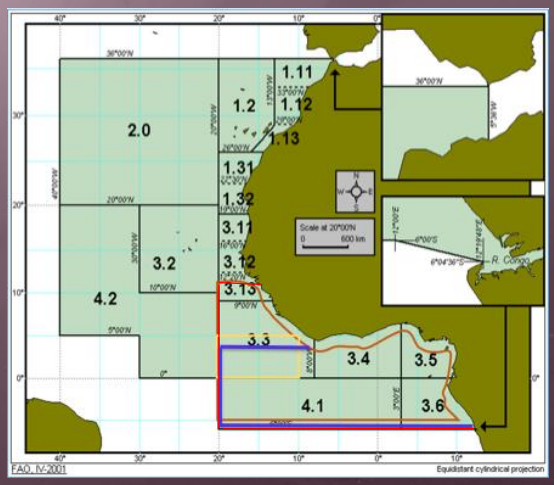
Synthesis of Findings Reached by the Ad-Hoc Working Group on FADs

- Fishing on FADs increases mortality on other species that are discarded and do not survive the fishing operations. Ecosystem changes detected from fishing in the Gulf of Guinea, however, are smaller than those estimated for other fished ecosystems.



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Synthesis of Findings Reached by the Ad-Hoc Working Group on FADs

Incidental catches of sea turtles and sharks are much smaller than incidental catches made by longliners. When best practices are used survival rates of sharks that reach the deck of the vessel are between 15-20% and survival rates of sea turtles are close to 100%.

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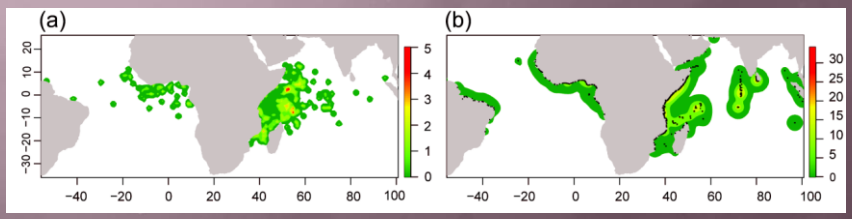
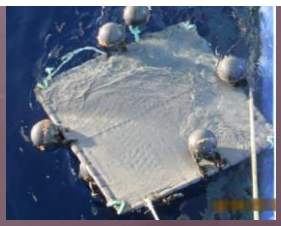
Synthesis of Findings Reached by the Ad-Hoc Working Group on FADs



Smoothed densities of FAD beaching events (b) and their deployment positions (a); black dots correspond to individual beaching positions (Maufroy et al. 2015)

FADs that are lost can potentially negatively impact ecosystems by contributing to marine debris, and drift into and damage sensitive habitats (such as coral reefs). During the period 2007-2013 approximately 10% of FADs equipped with buoys end up in the coast and some of these end up in sensitive habitats. Buoy monitoring can helps reduce the numbers of lost FADs through strategies that seek to recover and/or re-use them. Biodegradeble materials can also help.

Final Recommendations



- **Fishing capacity, including number of FADs**
- **FAD management plans**
  - *Definitions of FAD activities*
  - *Recovery of FADs*
- **FAD data reporting and scientific collaborations related to reporting obligations**
  - *Data reporting*
  - *Scientific collaborations*
- **Provision of scientific advice on FADs**
- **Compliance**
- **Marking and identification of FADs**
- **Observers**
- **Discards**